PINK BOLLWORM PROGRAM – WEEKLY REPORT 41 YEARS OF SERVICE TO COTTON GROWERS



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Week Ending May 31, 2008

Pink Bollworm Activities

Southern California:

Native Pink Bollworm (PBW) moths were captured at higher than expected levels for the second week in a row in the Blythe/Palo Verde Valley area of Riverside County. These moths were trapped in fields that were 100% *Bt* (*Bacillus thuringiensis*) cotton last year and are 100% *Bt* cotton again this year. Roughly 2% of *Bt* seed is non-expressive for the *Bt* endotoxin. Forty-five additional traps were placed in fields with the highest native PBW counts.



Native PBW Moth in Trap

In an effort to determine if this could be the result of a *Bt* resistance event, live moths from these traps were placed in 95% Ethyl Alcohol in preparation for testing for resistance to the *Bt* toxin. When one hundred live native PBW moths have been collected, they will be sent to Dr. Bruce Tabashnick at the University of Arizona. Dr. Tabashnik is a renowned researcher in the evolution and management of insect resistance to insecticides and transgenic plants. Bruce has extensively studied *Bt* resistance in pink bollworm.

A bloom survey of suspect fields is planned for the week of June 9 through the 13th. The PBW Program has been monitoring *Bt* cotton fields for resistance for nearly a decade. No resistance has been observed to date.

San Joaquin Valley:

Preliminary cotton mapping has been completed in Kern and Fresno Counties and is nearly complete in Kings, Tulare, and Madera Counties. Cotton acreage in the San Joaquin Valley appears to be running about 42% behind last years' acreage.

There were a total of 8,486,116 sterile moths released this week. This brings the seasons total released to 35,377,098. The 45 early detection traps in place have detected 7,118 sterile Pink Bollworm moths and zero (0) Native Pink Bollworm moths.

Sacramento Valley:

The latest heat unit projections indicate mapping and trapping will begin in mid August.